CASE REPORTS

A DERMOID TUMOR OF THE LATERAL VENTRICLE ASSOCIATED WITH INTERNAL HYDROCEPHALUS

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(Received for publication April 7, 1947)

Epidermoid and dermoid tumors involving the skull and intracranial spaces are relatively rare, constituting 0.3 to 6 per cent of all cerebral tumors in various reported series.

These tumors often occur beneath thepons and midbrain and extend up to the cerebellum pontile angle, causing an internal hydrocephalus, but may be found anywhere on the base of the brain from the anterior perforated substance to the foramen magnum. They may involve the cerebral hemispheres or lie within the ventricles, although reports of the latter have been meager.

They appear to arise from embryonic rests, resulting from inclusions of surface ectoderm within the central nervous system during embryological development. The epidermoid variety arise from the outer ectodermal layer, producing the so-called pearly tumors, while the dermoids have, in addition, mesodermal corium with its connective tissue, fat cells, sebaceous glands, and hair follicles. The presence of hair in the tumor may be considered as pathognomonic of a dermoid or teratoid type of growth.

Various reports of these tumors with detailed descriptions of their etiology, location, symptoms, appearance, pathology, and treatment have appeared in past years.1,2,3,4 It is not within the scope of this paper to repeat these details, but to report a dermoid tumor producing an unusual picture which we had not previously encountered or noted in earlier reports.

CASE REPORT

The patient was a young man, 24 years of age, who was first seen Dec. 12, 1941, when he complained of intermittent, mild headaches of 8 to 10 years' duration. During the past 2 years the headaches had become much more frequent and severe, and were chiefly occipital in location. They persisted from 2 to 3 hours up to 2 to 3 weeks, but were associated with vomiting on only one occasion. He had no other subjective symptomatology but his father commented on an impairment of memory, irritability, and an awkwardness in handling objects in either hand which had been apparent for 2 years. His past history revealed no important points relative to his present problem.

Examination. He was a well set-up young man who showed some obvious mental deficit and was rather apathetic. His general physical examination was essentially negative. Blood pressure: systolic 132, diastolic 78.

Neurological examination: Head, negative. Both optic nerve heads showed moderate papilloedema without hemorrhages or exudate. Visual acuity and fields were within normal limits. Other cranial nerves were normal. Power, sensation, reflexes, and coordination tests showed no abnormalities.

Blood count and urinalysis were normal.

X-rays of the skull showed some decalcification of the dorsum sella and some calcification in the anterior fossa just to the right of the midline over the orbital roof (Fig. 1).

Spinal puncture revealed an initial pressure of 700 mm. of water, and in view of the high pressure, very little fluid was removed. Cell count, 1; Wassermann, negative. Other tests could not be completed.

A diagnosis of right frontal neoplasm was made and ventriculograms were carried out,
revealing a large internal hydrocephalus with dilatation of the 3rd ventricle but with no air visible in the aqueduct of Sylvius. A shadow was seen in the right anterior horn where a mass was encroaching upon that portion of the ventricle (Figs. 2 and 3). As fluid was withdrawn from the right ventricle, a small amount of yellow oily material accompanied the fluid which contained some crystals and fat. It was felt that we were dealing with a cholesteatoma or dermoid tumor, extending into the right ventricle. The only explanation for the internal hydrocephalus seemed to lie in the probability that intermittent obstruction in the aqueduct

Fig. 1

Fig. 2

Fig. 3